

feature: it would be equally economical and ugly.—Mr. Brandon has four large domes, producing a picturesque and costly pile: the circular arrangement is not expedient.—Mr. Gearing proposes a suspension iron-wire tent, ingeniously ugly.—Mr. C. H. Smith adopts the suspension principle in another shape.—Messrs. Turner's proposal we described at some length before the competition.—One designed by Mons. Thummeloup is Gothic,* some Hindoo† and some in a mixed style, amusingly indicative of a desire to do justice to all times and countries in the same elevation.

The plan, elevations, and sections which we have engraved of the proposed design (although necessarily prepared in haste, that we might give our readers the advantage of early information on the subject), will explain themselves, and be found in accordance with the particulars we printed last week.† The central entrance will be exactly opposite to the Prince of Wales's Gate, in the Kensington-road, which is obviously desirable. But as this gate is not *exactly* in the centre of the plot of ground to be covered, the majority of the competitors seem to have missed this point, preferring to keep the building the same length on each side of the entrance.

The western half of the building will be devoted to machinery and raw materials; the eastern portion to manufactures and the plastic arts, to which latter also the great hall is to be appropriated. The refreshment places are amidst the clumps of trees. In the brickwork, externally, some variety of colour will probably be produced.

ON THE PROPRIETY OF THE APPLICATION OF CEMENTS,

OR OTHER ARTIFICIALLY FORMED MATERIALS, TO THE EXTERIORS OF BUILDINGS.‡

It is not, I believe, because there exists among our countrymen any lack of mind to conceive, or of constructive skill to carry out the most gigantic undertakings, that so comparatively small a number of buildings, remarkable for beauty, for originality, or for grandeur of design, have lately been produced; but partly because men's minds have been directed more towards other objects than the arts; partly because the carelessness of the public, and the unaccountable apathy of the profession, have allowed a small party to assume the direction of our art, and to introduce a movement of retrogression to the style and fashion of a former age, which must, I fear, if not soon checked, prevent, for some long period, all progress and improvement. And is it strange and unaccountable that architects and architecture are favoured with so small a share of public consideration in the present day, when it is remembered that, whilst in almost everything connected with our social condition, there has been manifested the strongest determination to encourage progress and improvement—those who profess to be the patrons and supporters of this really great and noble art, have exhibited an equally strong determination to go backwards, to prevent, so far as in them lies, the introduction into the ecclesiastical edifices of the nineteenth century, a single form or feature which has not been copied from some mediæval building, and even to disfigure the windows of our churches with such representations of the human form as were produced by the old glass painters, because they were unable to give more correct delineations.

Professor Cockerell, in (I believe) his fifth lecture of last session, at the Royal Academy, speaking of the fashions which have prevailed in architecture, is reported to have said:—

* Apparently not in the lists issued by the Committee. One "Contributor of Designs" asserts that many who sent in designs are not named in the lists published. We may correct a further error in the list which attributes a design, honourably mentioned, to Mr. Bouse; it should be Mr. H. J. Bouse.

† These should be referred to.

‡ Continued from p. 267, *ante*.

"The proofs of this fact (fashion in architecture) abound. Churches were Grecian, and for the last twenty years have been Gothic; intensely Roman Catholic. The sense has been wanting to understand that we do not want a Greek temple for the reception of a Cryselephantine statue, nor a Roman church for processions, and a sight only of the eucharist; but a Protestant auditorium, suited to the Anglican ritual, to which great purpose all form of dress, of whatever order and fashion, must bend and adapt itself."

In the opinions thus expressed by the learned professor, I believe that many thousands of his countrymen do most cordially agree. Without the slightest intention of making any disparaging remarks on the labours of those architects who have with so much care and skill sought out and given correct and beautiful illustrations of the structures and architectural details of the Middle Ages, I would respectfully suggest that the time has now arrived when the efforts so strenuously made in obtaining intelligence on these subjects may well be slackened, and the talents of those gifted individuals be directed to investigations which may result in the production of novelty, beauty, fitness in design, of greater economy, combined with durability and beauty in the construction of our buildings,—in adapting to the wants of the existing generation those great discoveries in physical science, which may, and ought to, increase so largely the diffusion of comfort and rational enjoyment amongst all classes of the community, and in making our age and country as remarkable for the dissemination of a love of true art amongst the masses of the people, as it is for an amount of commercial energy and enterprise, which stand unrivalled in the annals of the world.

The homes of England have now for many ages been considered as worthy of our best attention, and no small portion of that industrious perseverance, for which our countrymen are justly celebrated, may be attributed to the desire of possessing a commodious and healthful dwelling, which so extensively prevails amongst them. There was a time when men cared little whether or not these homes were situated in the country, so that they contained the requisite accommodation for their families. But this indifference to position, which some time before the introduction of railway travelling had been gradually lessening, has since the development of that wondrous system almost wholly disappeared; and men of all classes and conditions, influenced mainly by the facilities for travelling which are now placed within their reach, appear determined to find or to build in some rural district such habitations for themselves and for their families as shall combine, with every provision for comfort and convenience, as much of symmetry and beauty as the talent of their architect and the means at their disposal will allow. Whilst, however, men of various ranks and stations are eagerly bent upon obtaining the unquestionable advantages of a country residence, and are disposed, in many cases, to incur for the attainment of this object such an expenditure (however large) as may be really necessary, they are almost invariably unwilling to make any considerable addition to their outlay, either for the purpose of building or casing their houses with stone instead of artificially formed materials, or for the introduction of features which, although generally found in ancient buildings, are now from changes and habits and modes of living, no longer useful. That this feeling, whether right or wrong, does very extensively prevail, not only among the professional and trading portions of the community, but that it is also found in many cases to exist among those who are possessed of high rank and station, must be well known to many members of this Institute.

Now if we admit that a dry, commodious, and well-arranged house does very materially assist in promoting the health and happiness of those who occupy it; that the present cheap and easy mode of travelling is leading to a very large increase of private dwellings in the country; that those by whom these dwellings are erected, although for the most part anxious to combine convenience with beauty, will not consent to any considerable increase of expenditure in the employment of natural instead of artificial materials, when the latter are well

adapted for the required purpose, and possess both durability and beauty; and that in many localities no stone or bricks can be obtained which, of themselves, are capable of excluding rain or of resisting the destroying influences of frost,—it must, I think, be also granted, that few subjects can be more deserving of our best attention than those artificial coverings or skins which are in many cases really indispensable, and might in many others be most advantageously employed.

To those objections which are made against these artificial coverings on account of the expenses said to be incurred in reparations, and in frequent repetitions of colouring or painting, I attach but very little weight, because my own experience has convinced me that if the right materials are employed no painting or colouring will be required, and that the total cost of reparation (when the materials are of good quality and the work well executed) does not amount to anything like one per cent. on the original cost, within five years from its completion; and after that period has elapsed, I believe that its durability for fifty, seventy, or even a hundred years, may very safely be predicted. That the extent of durability and adaptability which artificially-formed materials possess, or which by further improvements and discoveries may hereafter be obtained, is the really important question, it seems to me impossible to doubt; for it surely never can be seriously asserted that if by an expenditure of 1,000*l.*, or the amount of labour which that sum represents, we can obtain in an artificial material more warmth and greater freedom from damp internally, with as much beauty and durability externally, as can be produced for 4,000*l.* in stone, we are to adopt the latter, and reject the former. Shall we not then act like faithful stewards if, in many cases, when called upon to prepare designs for the dwellings of our countrymen—buildings which are to be numbered amongst the homes of England—we devote the money which might be expended in an external case of stone to the increase of internal accommodation, to the enlargement and proper decoration of the apartments in which our clients and their families are to spend by far the larger portion of their time, to rendering the building proof against the ravages of fire, to providing copious supplies of water and numerous accommodations and conveniences which, although required by the habits of the age, and essential to the comfort and well-being of the tenants, are yet not always found even in the most costly of our houses.

As to the peculiar properties, the excellences, or the defects of the various cements and artificially-formed materials to which the attention of the profession is so frequently solicited, it is not my intention on this occasion to say much. There is, however, one material which can perhaps scarcely be called a cement according to the general acceptance of the term, to which my attention has been a good deal directed, and which has been very extensively used under my directions. It is one with which most are familiar, and I should not venture to offer the few remarks upon it with which I am about to trouble you, if I did not believe that I have had more than ordinary opportunities of testing its capabilities in various ways, and in remarkably exposed situations. As it is one, moreover, with which manufacturers of cements have little or nothing to do, the processes required in its preparation being extremely simple and inexpensive, whatever I may say in favour of its durability and beauty, will not tend much to the advancement of any particular interest.

This material, usually known as stucco, is, in reality, nothing more than mortar, formed either of blue lias lime, ground or slaked, and mixed with pounded slag, from the smelting furnaces; or of the grey stone lime, so extensively used in London, ground and mixed with clean, sharp, carefully washed, siliceous sand, in the proportion of one part of lime to three parts of sand, excepting for the outer surface or facing, where nearly equal parts of lime and sand are generally used. The lime and sand (whether siliceous or metallic) should be mixed well together, in small quantities, and applied immediately to the work, which, in order to insure success, should, in all cases, be first well saturated with water. With this mortar, formed in either of the two ways which I